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Pig Organ Transplant Reflection

Organ shortages have been a problem in America for a very long time. There have almost always been more patients in need of various organs such as kidneys than there are organ donors. Ever since the popularity of this problem has grown, researchers and doctors everywhere have been trying to come up with solutions to this organ shortage crisis. Many ideas have been proposed, such as growing the organs from scratch or taking these organs from other primates. However, many of these ideas are either too complicated or are considered inhumane by many. Recently, however, scientists in Massachusetts have announced a major breakthrough that they discovered. By altering the genes of a pig, the scientists found that pig organs could be made compatible for human transplants. For a very long time, people have been looking into the idea of xenotransplants, but have come to a roadblock; viruses that affect the donating organism could also affect the human. To be precise, there are exactly 25 retroviruses that could affect humans but not pigs. However, the scientists in Massachusetts were able to navigate around this problem by using CRISPR technology to edit these genes of the harmful retroviruses, making the cells compatible with humans, meaning that the pig cells are now better suited to be transplanted into humans. However, the work animal-human transplantation is not complete just yet. The article goes into detail of the many other barriers that scientists still have to break in order to achieve the possibility of xenotransplants. I think that this discovery is critical in the advancement of transplants. Once fully developed, xenotransplants can save millions of lives in the world. With

such an easy and humane way of getting organs for transplants, people will not have to think twice about developing this technology. Overall, I think that this discovery will be very useful, and the further implications will be able to save many lives in the future.